2025-26 Alternative Delivery Assessment Plan

Department: Natural Sciences Date: 9/4/25 Course: BIO 111
Alternative Format(s) – select as many as are applicable: Dual Credit Select Select

Members (**must include more than course instructor only**) **involved with the development of this Assessment Plan: Rob Hermann, Kristy Jurchen, Raegan Skelton**

Course Requirements: Course syllabi and credit hour calculators are collected by the Dual Credit Coordinator (Dual Credit Courses) and the respective Deans for other courses.

Student Outcome:

1. *What student outcome will be assessed? Do students understand basic concepts of the process of science, cell biology, biochemistry, genetics, and molecular biology, and can they apply their knowledge of these topics?*
2. **State as follows: Students should be able to [action verb] [something**]. Students should be able to demonstrate an understanding of a selection of fundamental concepts and basic knowledge of the process of science and introductory molecular and cell biology.

Question: *What specific question(s) are you attempting to answer through assessing this student outcome? (What are you trying to find out? There may be more than one question, but no more than three.)* Do students understand basic concepts of the process of science, cell biology, biochemistry, genetics, and molecular biology, and can they apply their knowledge of these topics?

Methodology

1. **Student Outcome** - *OBJECT**
    a. *What student artifact from the traditional course will be used to assess the outcome*? A survey of questions testing the understanding and application of basic concepts in the process of science, cell biology, biochemistry, genetics, and molecular biology.
        i. *How will the artifact be collected?* As questions on the final exam
    b. *What student artifact from the alternative course(s) will be used to assess the outcome?* A survey of questions testing the understanding and application of basic concepts in the process of science, cell biology, biochemistry, genetics, and molecular biology.
        i. *How will the artifact be collected?* As questions on the final exam

Analysis of Artifacts:

1) **Student Outcome:** *PERFORMANCE CRITERIA**
    a. *How will the artifacts be analyzed (attach rubrics/scoring tools if used):*
        i. Traditional course: Cumulative final exam multiple choice questions will be graded
        ii. Alternative course(s) (note SAME if the same as the traditional course): SAME

2) ***COMPARABILITY*** - ***How you will determine if the outcomes of the two are comparable?***
(For example – there will not be a statistically significant difference among the mean final exam scores). A t-test will be used to assess whether the means between the traditional and dual credit classes are statistically different.

Submitted by: Raegan Skelton Date: 9/4/25 Assessment Committee Reviewed (Date): 9/4/25

Submitter notified of approval/ or additional action needed: Approved